



Photo Source: US DOT

# ITS RESEARCH DATA

The U.S. Department of Transportation (USDOT) Intelligent Transportation System (ITS) Joint Program Office (JPO) is committed to providing timely access to relevant federally funded ITS research data.



The ITS DataHub (available at [www.its.dot.gov/data](http://www.its.dot.gov/data)) provides a single point of entry to discover available USDOT ITS research data. By providing access to these data, the USDOT aims to enable third-party research into the effectiveness of emerging ITS technologies, preliminary development of third-party applications, and harmonization of data across similar collections.

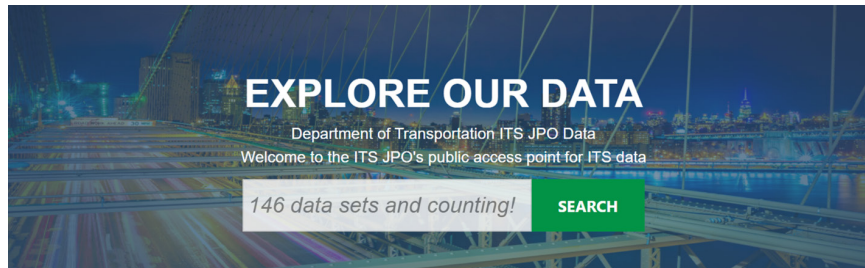


Photo Source: USDOT

## Featured Data Sets

The following are highlights of the data sets available on the ITS DataHub:

**Wyoming Connected Vehicle Pilot:** Preliminary field test data from the Wyoming pilot site is now streaming to the public. This data set includes Basic Safety Messages (BSMs) and Traveler Information Messages (TIMs) from several test vehicles and roadside equipment. Users can access the full data set through a standard application programming interface (API) or work with a sample of the data through an interactive interface online.

**Test Data of Proof-of-Concept (POC) Vehicle Platooning Based on Cooperative Adaptive Cruise Control (CACC):** The data represent the testing of a POC vehicle platooning framework based on the CACC connected vehicle application. The data characterize the state-of-the-art capability of the CACC application based on engineering tests that were performed on closed tracks by professional drivers and using prescribed test procedures.

**Multi-Modal Intelligent Transportation Signal Systems (MMITSS):** MMITSS is a next-generation traffic signal system that seeks to provide a comprehensive traffic information framework to service all modes of transportation. Data sets generated during the MMITSS field test study include BSMs, vehicle trajectories, signal timing plans, and GPS data for field test vehicles.

[www.its.dot.gov/data](http://www.its.dot.gov/data)

## Available Data Sets

- **NEW!** Wyoming Connected Vehicle Pilot (Preliminary Field Testing)
- **NEW!** Test Data of POC Vehicle Platooning Based on CACC
- Advanced Messaging Concept Development
- Over 100 additional datasets available for free, public access

## Future Data Sets

- New York City Connected Vehicle Pilot
- Tampa Connected Vehicle Pilot
- Smart Columbus
- Vehicle Platooning Prototype

## Data May Be of Interest to:

- ITS Project Managers
- Application Developers
- Transportation Researchers



U.S. Department of Transportation



## Purpose of the ITS DataHub

The ITS JPO and its multimodal partners are dedicated to providing open access to publicly funded research data. In 2018, the ITS DataHub became the USDOT's primary storage and access system for ITS data. The system utilizes shared services such as the National Transportation Library (NTL) and [data.transportation.gov](https://data.transportation.gov) (DTG) to provide access to timely, discoverable, well-curated research data for public access. This data helps advance the ITS JPO's multimodal mission by:

- Facilitating early user input into USDOT research efforts, informing multi-phased research projects in real time to improve future deliverables and research goals
- Enabling third-party research into the effectiveness of these emerging ITS technologies, secondary analysis on primary ITS data collection, and harmonization of data across similar collections
- Enabling preliminary development of third-party applications using the data generated by ITS JPO projects.

The ITS DataHub enables a streamlined, consistent, replicable process for data providers to load data into the system. This process reduces barriers to sharing timely data with the research and development community. Learn more at: <https://www.its.dot.gov/data/about/>.



Photo Source: USDOT

## Data Access Features

### ***Timely access to data from ongoing ITS projects***

The ITS JPO is working with data providers to begin making data available during the demonstration phase to facilitate early user input into USDOT research efforts. This will expedite access to data—promoting faster adoption of the new data and research. Learn more at: <https://its.dot.gov/data/public-access/>.

### ***Ability to create visualizations and conduct analysis online***

The ITS DataHub allows users to create basic visualizations of data sets online including maps, charts, and graphs without downloading the data. Visualizations can be performed with any combination of columns and rows in the data set.

### ***Enhanced user interface for viewing, filtering, and downloading ITS data***

The system allows users to filter the data set by adding filter conditions. Filter conditions can be executed for all columns in the data set and a user can add as many filter conditions as desired. Users can also download their filtered data in a broad range of formats.

The system also allows users to download the data in a variety of formats including CSV, JSON, or XML. Users can also programmatically download data using the API provided for each data set stored on [data.transportation.gov](https://data.transportation.gov).

### ***Shared analysis of ITS data***

Users can also save filtered data sets, visualizations, and graphs as a public “view,” which other users can then access. This will promote collaborative learning as the community grows around new data. The data is available for free public use under a Creative Commons license (CC BY-SA 4.0).

### ***Access to system metrics***

The metrics dashboard provides statistics on user activity on the ITS DataHub system including page views, data downloads, and programmatic data access: <https://www.its.dot.gov/data/metrics/>.

For more information about this initiative, please contact:

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